

IN THE CLAIMS:

Please Cancel claims 21 and 25-30. The claims remaining in this application are as follows:

19. (Previously added) An optical interconnect structure with integral reflective surface and lens comprising:

a substrate;

a plurality of waveguides formed on said substrate, each of said waveguides having a cylindrical lens formed on at least one end thereof; and

a plurality of reflective structures formed of the same material as the substrate and integral with said substrate, each reflective structure having a reflective surface optically aligned with a corresponding one of the plurality of waveguides, the structure configured to reflect light between the waveguides and a plurality of optoelectronic devices attached to the substrate.

20. (Currently amended) An optical interconnect structure as in claim 19, wherein the radius of curvature (R) of the cylindrical lenses is selected in accordance with a formula expressed as follows:

$$1/f = (u-1)/R$$

"f" being the focal length of the lenses ~~transmitted light~~; and

"u" being the refractive index of the waveguide.

21. (Canceled)

22. (Previously added) An optical interconnect structure as in claim 19 wherein said substrate comprises silicon.

23. (Previously added) An optical interconnect structure as in claim 22, wherein said reflective structures have their reflective surfaces formed at an angle of approximately 125 degrees.

24. (Previously added) An optical interconnect structure as in claim 19, wherein said optoelectronic device is a vertical cavity surface emitting laser.

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)